

Amendments to the Claims:

(currently amended) A computer-implemented method for managing access to a resource that is accessible to a plurality of entities, the method comprising the steps of:

for each entity of said plurality of entities, maintaining, local to said entity, data that indicates whether any other entity of said plurality of entities has an exclusive lock on said resource;

for each entity of said plurality of entities that seeks to acquire a shared lock on said resource, performing the steps of:

 checking the data that is local to the entity;

 if the data indicates that an exclusive lock has not been granted to any of the other entities of said plurality of entities, then the entity acquiring said shared lock without receiving a lock grant from a resource master of said resource; and

 if the data indicates that an exclusive lock has been granted to any of the other entities of the plurality of entities, then the entity acquiring said shared lock only after said exclusive lock is released by the entity that has been holding said exclusive lock.

2. (original) The method of Claim 1 wherein the entity acquires said shared lock without communication with the resource master of the resource.

3. (previously amended) The method of Claim 1 wherein the step of the entity acquiring said shared lock only after the exclusive lock is released is performed by the step of

3 repeatedly checking the data that is local to the entity until that data indicates that the
4 exclusive lock has been released by the entity that has been holding the exclusive lock.

1 4. (currently amended) The method of Claim 1 wherein the step of the entity acquiring said
2 shared lock only after the exclusive lock is released is performed after a step of receiving
3 a message from the resource manager master notifying that the entity is allowed to acquire
4 said shared lock.

1 5. (previously amended) The method of Claim 1, upon the exclusive lock being released by
2 the entity that has been holding the exclusive lock, performing the step of updating each
3 data of the plurality of entities to reflect that none of the plurality of entities is holding an
4 exclusive lock.

1 6. (currently amended) The method of Claim 5 wherein the step of updating is initiated by
2 the resource manager master that broadcasts messages to the plurality of entities for each
3 entity of the plurality of entities to modify the data corresponding to the each entity.

1 7. (original) The method of Claim 1 wherein an entity of said plurality of entities is a
2 database server.

1 8. (currently amended) A computer-implemented method for managing access to a resource
2 that is accessible to a plurality of entities, the method comprising the steps of:
3 for each entity of said plurality of entities, maintaining, local to said entity, data that
4 indicates whether any other entity of said plurality of entities has an exclusive lock
5 on said resource;

6 for each entity of the plurality of entities that seeks to acquire an exclusive lock on said

7 resource, performing the steps of:

8 requesting, from a resource manager, said exclusive lock for said entity; wherein

9 said resource manager manages access to said resource;

10 if no conflicting lock is being held by any other entity of the plurality of entities,

11 then

12 said entity acquiring said exclusive lock, and

13 updating the data of the plurality of entities to reflect that an exclusive lock

14 is being held by one of the plurality of entities.

1 9. (original) The method of Claim 8 wherein, upon recognizing that no conflicting lock is

2 being held by any of the entity of the plurality of entities, then the resource manager

3 allowing the entity that seeks to acquire an exclusive lock to acquire that exclusive lock.

1 10. (original) The method of Claim 8, wherein, if an exclusive lock is being held by any

2 entity of the plurality of entities, then indicating to the entity that is holding said exclusive

3 lock that another entity of the plurality of entities is waiting for a lock.

1 11. (previously amended) The method of Claim 10, wherein, upon said exclusive lock is

2 being released by the entity that is holding said exclusive lock, indicating to the resource

3 manager that said exclusive lock has been released by the entity that is holding said

4 exclusive lock.

1 12. (previously amended) The method of Claim 8, wherein, if a shared lock is being held by
2 any entity of the plurality of entities, then indicating to all entities that are holding a
3 shared lock that an entity of the plurality of entities is waiting for an exclusive lock.

1 13. (currently amended) The method of Claim 12 wherein each entity of all entities that ~~is~~ are
2 holding a shared lock, upon releasing said shared lock, indicates to said resource manager
3 that the corresponding shared lock that is held by that entity has been released.

1 14. (original) The method of Claim 8 wherein an entity of the plurality of entities is a
2 database server.

1 15. (currently amended) A computer-readable medium carrying instructions for managing
2 access to a resource that is accessible to a plurality of entities, the instructions including
3 instructions for performing the steps of:
4 for each entity of said plurality of entities, maintaining, local to said entity, data that
5 indicates whether any other entity of said plurality of entities has an exclusive lock
6 on said resource;
7 for each entity of said plurality of entities that seeks to acquire a shared lock on said
8 resource, performing the steps of:
9 checking the data that is local to the entity;
10 if the data indicates that an exclusive lock has not been granted to any of the other
11 entities of said plurality of entities, then the entity acquiring said shared
12 lock without receiving a lock grant from a resource master of said
13 resource; and

14 if the data indicates that an exclusive lock has been granted to any of the other
15 entities of the plurality of entities, then the entity acquiring said shared
16 lock only after said exclusive lock is released by the entity that has been
17 holding said exclusive lock.

1 16. (original) The computer-readable medium of Claim 15 wherein the entity acquires said
2 shared lock without communication with the resource master of the resource.

1 17. (previously amended) The computer-readable medium of Claim 15 wherein the step of
2 the entity acquiring said shared lock only after the exclusive lock is released is performed
3 by the step of repeatedly checking the data that is local to the entity until that data
4 indicates that the exclusive lock has been released by the entity that has been holding the
5 exclusive lock.

1 18. (currently amended) The computer-readable medium of Claim 15 wherein the step of the
2 entity acquiring said shared lock only after the exclusive lock is released is performed
3 after a step of receiving a message from the resource ~~manager~~ master notifying that the
4 entity is allowed to acquire said shared lock.

1 19. (original) The computer-readable medium of Claim 15 further including instructions for
2 updating, in response to the exclusive lock being released by the entity that has been
3 holding the exclusive lock, each data of the plurality of entities to reflect that none of the
4 plurality of entities is holding an exclusive lock.

1 20. (currently amended) The computer-readable medium of Claim 19 wherein the step of
2 updating is initiated by the resource ~~manager~~ master that broadcasts messages to the
3 plurality of entities for each entity of the plurality of entities to modify the data
4 corresponding to the each entity.

1 21. (original) The computer-readable medium of Claim 15 wherein an entity of said plurality
2 of entities is a database server.

1 22. (currently amended) A computer-readable medium carrying instructions for managing
2 access to a resource that is accessible to a plurality of entities, the instructions including
3 instructions for performing the steps of:
4 for each entity of said plurality of entities, maintaining, local to said entity, data that
5 indicates whether any other entity of said plurality of entities has an exclusive lock
6 on said resource;
7 for each entity of the plurality of entities that seeks to acquire an exclusive lock on said
8 resource, performing the steps of:
9 requesting, from a resource manager, said exclusive lock for said entity; wherein
10 said resource manager manages access to said resource;
11 if no conflicting lock is being held by any other entity of the plurality of entities,
12 then
13 said entity acquiring said exclusive lock, and
14 updating the data of the plurality of entities to reflect that an exclusive lock
15 is being held by one of the plurality of entities.

1 23. (original) The computer-readable medium of Claim 22 carrying instructions to cause the
2 resource manager to allow the entity that seeks to acquire an exclusive lock to acquire that
3 exclusive lock if no conflicting lock is being held by any of the entity of the plurality of
4 entities.

1 24. (original) The computer-readable medium of Claim 22, carrying instructions for
2 indicating to the entity that is holding said exclusive lock that another entity of the
3 plurality of entities is waiting for a lock when an exclusive lock is being held by any
4 entity of the plurality of entities.

1 25. (original) The computer-readable medium of Claim 22, carrying instructions for
2 indicating to all entities that are holding a shared lock that an entity of the plurality of
3 entities is waiting for a lock if a shared lock is being held by any entity of the plurality of
4 entities.

1 26. (previously amended) The computer-readable medium of Claim 22 carrying
2 instructions for causing each entity of all entities that are holding a shared lock, upon
3 releasing said shared lock, to indicate to said resource manager that the corresponding
4 shared lock that is held by that entity has been released.